R&D Strategy for JLOTS/Enhanced Coastal Force Projection 1-3 February 2000

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Battle Lab Proponent: Force Projecton Battle Lab Support Element

The Role of Coastal Force Projection in the New Army Vision

- Requirements
  - Deployment
    - Brigade Combat Team - 96 hours
    - Warfighting Division - 120 hours
    - 5 Divisions - 30 days
  - Sustainment
    - Systems approach
    - Revolutionary manner of transport and sustainment

The Role of Coastal Force Projection in the New Army Vision

- Potential Problems
  - Deployment
    - Under current optimal assumptions using air transportation alone, BCT takes 8 days
    - 5-Division timeline presently is not feasible
  - Sustainment
    - Critical supply rates are not sustainable by air transport alone

Strategy for Future R&D

- JLOTS Assessments
  - Marine-based logistics essential to meet Force Projection timelines and sustainment needs
    - BG Mortenson - Commandant T-School
    - COL Cannon - PM FPES-TACOM
    - COL Garcia - Commander FPBLSE
  - Maritime-based logistics are playing increasing role in commercial transportation
    - Emerging high-speed technologies
    - Improved cargo-handling capabilities

Strategy for Future R&D

- Today - Bare Beach Emphasis
  - Considered most difficult form of austere port
  - Fragile
  - Relatively slow throughput
  - Difficult to link to inland infrastructure
  - Requires development of new technology systems

Strategy for Future R&D

- Future - Small Port Emphasis
  - Robust
  - Rapid throughput achievable
  - Established links to infrastructure
  - Can use emerging high-speed ship technology
  - Requires rapid port enhancement capabilities **
  - Improved coastal mobility capability **

Strategy for Future R&D

- Proposed major components of future Coastal R&D
  - Rapid Port Enhancement
    - Rapid breakwater systems/repairs
    - Rapid improvement in discharge/cargo handling
    - Rapid infrastructure improvement
  - LOTS Pilots
    - Site studies of existing ports/harbors
    - Environmental information
  - Improved Coastal Logistics
    - Sandy soils
    - Wet Soils
  - Improved Integrated Throughput Models (CITM)

Small Port Discharge Advantages

- Utilize very fast ship technology
- Operate through SS4
- Utilize commercially available off-load systems
- Simplify discharge operations (no current or waves)
- Eliminate special ramps
- Separate two technical problems:
  - sea-keeping
  - discharge
- Use off-shore discharge